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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,555	08/01/2001	Takayoshi Togino	P 265243 OL96701N-US	3585

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Pillsbury Winthrop LLP
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EXAMINER

YOON, TAE H

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 09/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

As

Office Action Summary

Application No.

09/918,555

Applicant(s)

TOGINO ET AL.

Examiner

Tae H Yoon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-8 and 17-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Makishima et al (US 4,639,329).

Makishima et al teach an organic/inorganic functional composite in abstract and examples and at col. 1, line 54 to col. 2, line 18. Its use in various opto-electronics fields is taught at col. 1, lines 13-21. The instantly recited optical conditions are inherent in said composite of Makishima et al. Thus, the instant invention lacks novelty.

Claims 1-4 and 6-20 are rejected under 35 U.S.C. 103(a) as obvious over Makishima et al (US 4,639,329).

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Various shapes of said composite and a position of said composite in an optical system would be obvious to one skilled in the art at the time of invention.

Claims 1-3, 5-8 and 17-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gillberg-LaForce et al (US 4,913,845).

Gillberg-LaForce et al teach organic/inorganic composite comprising the metal colloid dispersed in a polymeric matrix at col. 2, lines 30- 38 and example 1 wherein the metal particle size of 55 Å(5.5 nm) is taught. An optical light switch and light modulator device with an optical component are taught at col. 2, lines 66-68. The instantly recited optical conditions are inherent in said composite. Thus, the instant invention lacks novelty.

Claims 1-3, 7 and 8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hamblen et al (US 5,143,659).

Hamblen et al teach microlenses formed from organic/inorganic composition or sol-gel at col. 1, lines 36-39. Hamblen et al also teach the use of said microlenses in various opto-electronics fields at col. 1, lines 16-36. Said organic component inherently forms a three-dimensional network. Thus, the instant invention lacks novelty.

Claims 1-3 and 7-16 are rejected under 35 U.S.C. 103(a) as obvious over Hamblen et al (US 5,143,659).

Various shapes of said microlenses and a position of said microlenses in an optical system would be obvious to one skilled in the art at the time of invention.

Claims 1-13 and 17-20 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Arakawa et al (US 6,476,098).

Arakawa et al teach an organic/inorganic composite in abstract and examples. The surface of metal oxide particles is bonded covalently to the organic polymer (col. 3, lines 33-42, col. 5, lines 13-47 and col. 7, lines 7-12), and the particle size of metal is 0.001 to 0.1 μm (1 to 100 nm, col. 6, lines 1-10). Molded articles of various shapes such as sphere or block (col. 12, lines 43-50) and their applications such as optical material (col.13, lines 6-13) are also taught. For example, said block would have a rotationally asymmetric surface configuration. The instantly recited optical conditions are inherent in said composite of Arakawa et al. Thus, the instant invention lacks novelty.

Claims 1-8 and 17-19 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Koyama et al (US 6,590,722).

Koyama et al teach an organic/inorganic composite in examples 1 and 2, and its use as prisms, lenses and diffraction gratings at col. 9, lines 27-46 and col. 12, lines 25-31 and claims 2, 4 and 8. The instantly recited optical conditions are inherent in said composite. Thus, the instant invention lacks novelty.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as obvious over Koyama et al (US 6,590,722).

Various shapes of said composite and a position of said composite in an optical system would be obvious to one skilled in the art at the time of invention since Koyama et al teach prisms, lenses and diffraction gratings.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as obvious over Arakawa et al (US 6,476,098) alone, or in view of Koyama et al (US 6,590,722) or Yoshimura et al (US 6,534,589) or Imanishi et al (US 6,124,964).

The instant invention further recites a shape and position of an optical element and Abbe's number and a refractive index thereof over Arakawa et al. However, Arakawa et al teach an optical material at col. 13, line 9, and thus the instant modification would be an obvious modification. Koyama et al teach an organic/inorganic composite and its use as prisms, lenses and diffraction gratings at col. 9, lines 27-46 and col. 12, lines 25-31 and claims 2, 4 and 8, and Yoshimura et al teach an optical element having the instant Abbe's number and a refractive index in table 2. Imanishi et al teach an optical system having an optical element capable of changing optical characteristics such as reflectivity and a refractive index in Fig. 4B and claim 1.

It would have been obvious to one skilled in the art at the time of invention to make an optical element having the instant shape or Abbe's number and a refractive index thereof or to position said optical element in a system in Arakawa et al with or without teaching of the secondary reference since Arakawa et al teach the use of said


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composite as an optical material and since such use is well known as taught by Koyama et al and Imanishi et al and since an optical material having the instant Abbe's number and a refractive index is well known as taught by Yoshimura et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H Yoon whose telephone number is (703) 308-2389. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Tae H Yoon
Primary Examiner
Art Unit 1714

THY/September 22, 2003